## IN THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as is shown below. This listing of claims replaces all previous versions and listings of claims in the present application.

# **LISTING OF CLAIMS**

- 1. (Currently Amended) <u>A Document computer implemented document</u> classification apparatus, comprising:
- <u>a</u> feature <u>extractor that extracts</u> <u>extraction means for extracting</u> a plurality of features from a document; <u>and</u>
- a classifier operable on the extracted features to process the document in a knowledge acquisition mode in which the association of a classification with the document is added incrementally to a knowledge base or and in a document classification mode in which the classifier, using the knowledge base, is operable to determine determines a predicted classification for the document, the classifier being switchable between the modes under user control; and

a router arranged to route the document to one of a plurality of destinations in dependence upon the classification, wherein the classification has associated therewith a confidence value.

and wherein the confidence value is comparable to a threshold, the router being arranged to make at least one of an automatic routing decision and a manual routing decision in dependence upon the comparison.

- 2. (Currently Amended) <u>The computer implemented document classification</u> <u>apparatus Apparatus as claimed in claim 1, wherein the classifier comprises a supervised adaptive resonance theory (ART) system.</u>
- 3. (Currently Amended) <u>The computer implemented document classification</u> <u>apparatus Apparatus as claimed in claim 2, wherein the system comprises an ARTMAP system.</u>
- 4. (Currently Amended) <u>The computer implemented document classification</u>
  <u>apparatus Apparatus</u> as claimed in claim 2, wherein the system comprises an <u>adaptive</u>
  resonance associative map (ARAM) system.

# 5-7. (Cancelled)

- 8. (Currently Amended) <u>The computer implemented document classification</u> <u>apparatus Apparatus as claimed in claim 7 1, wherein the threshold is adjustable.</u>
- 9. (Currently Amended) The computer implemented document classification apparatus Apparatus as claimed in claim 7\_1, or wherein a said destination is a system administrator workstation where the document is routed, responsible for manual routing after the manual routing decision.
  - 10. (Currently Amended) The computer implemented document classification

<u>apparatus</u> Apparatus as claimed in claim 1, wherein the features are formed into a feature vector for input to the classifier.

- 11. (Currently Amended) The computer implemented document classification apparatus Apparatus as claimed in claim 1, wherein the features comprise at least one of classification-associated words or and phrases which may appear in the document.
- 12. (Currently Amended) The computer implemented document classification apparatus Apparatus as claimed in claim 1, wherein the extracting means feature extractor is arranged to provide a measure of the frequency of occurrence of the features in the document.
- 13. (Currently Amended) The computer implemented document classification apparatus Apparatus as claimed in claim 5 1, wherein the destinations include a system administrator workstation to which the other destinations are connected, mis-routed misrouted documents being sendable by the other destinations to the system administrator workstation for manual routing.
- 14. (Currently Amended) The computer implemented document classification apparatus Apparatus as claimed in claim 13, wherein the system administrator workstation is connected to the feature extraction means extractor and the classifier, the arrangement being such that a said mis-directed misdirected document, in association with an actual classification supplied at by the system administrator

<u>workstation</u>, is processed in <u>the knowledge acquisition mode to add the association of the actual classification with the <u>mis-directed misdirected</u> document to the knowledge base.</u>

- 15. (Currently Amended) The computer implemented document classification apparatus Apparatus as claimed in claim 1, wherein the computer implemented document classification apparatus is operable to perform a rule insertion in the knowledge acquisition mode in which a plurality of features are input by a user to the classifier together with a classification with which the features are associated.
- 16. (Currently Amended) The computer implemented document classification apparatus as claimed in claim 1, wherein the computer implemented document classification apparatus is operable in the knowledge acquisition mode to process a plurality of training documents with associated classifications as a batch.
- 17. (Currently Amended) <u>A computer implemented document Document</u> classification apparatus, comprising:

<u>a</u> feature extraction means for extracting extractor that extracts a plurality of features from a document[[,]];

a classifier operable, using a knowledge base, to determine from the features a predicted classification for the document, the classification having a confidence value associated therewith; and

a router arranged to compare the confidence value to a threshold and make a decision to route the document automatically to one of a plurality of destinations of and to a destination for manual routing in dependence upon the comparison.

18. (Currently Amended) (Currently Amended) <u>The computer implemented</u> document classification apparatus Apparatus as claimed in claim—13\_17, wherein the threshold is adjustable.